Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Project Division

Name of Work: Consultancy Services for preparation of Survey, Designs, Drawing, Estimate preparation etc., (Detailed Project Report) For the work of Construction of RCC Road and Drain in Surrounding Area in Ward No.05 Byatarayanapura Sub Division in Ward No 05.

Est Cost: =258.00Lakhs

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 10km lead= 57+2.0x1.28x5 =69.80								
	Basic rate	130.00							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	199.80							
	6% AW	7.80							
	Total	207.60							
	New RCC Drain								
	Near Vajram Apartment								
	Vijayaraj Estate Road	2	410.00	1.00	0.80	656.00			
	Shivapura, Bagalur Main Road								
	1st B Cross Road	2	270.00	1.00	0.80	432.00			
	2nd B Cross Road	2	260.00	1.00	0.80	416.00			
	3rd A Cross Road	2	40.00	1.00	0.80	64.00			
	3rd B Cross Road	2	60.00	1.00	0.80	96.00			
	4th A Cross Road	2	150.00	1.00	0.80	240.00			
	4th A Cross Road	1	50.00	1.00	0.80	40.00			
	5th A Cross Road	2	160.00	1.00	0.80	256.00			
	5th B Cross Road	1	50.00	1.00	0.80	40.00			
	6th B Cross Road	2	127.00	1.00	0.80	203.20			
	RCC Culvert								
	New Culverts	10	8.00	1.40	1.15	128.80			
		3	10.00	1.40	1.15	48.30			
						2620.30	**Cum**	**207.60**	**543974.28**
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	Basic rate	5115.00							
	6% AW	306.90							
	Sub Total	5421.90							
	For CC Drain								
	Near Vajram Apartment								
	Vijayaraj Estate Road	2	410.00	1.00	0.10	82.00			
	Shivapura, Bagalur Main Road								
	1st B Cross Road	2	270.00	1.00	0.10	54.00			
	2nd B Cross Road	2	260.00	1.00	0.10	52.00			
	3rd A Cross Road	2	40.00	1.00	0.10	8.00			
	3rd B Cross Road	2	60.00	1.00	0.10	12.00			
	4th A Cross Road	2	150.00	1.00	0.10	30.00			
	4th A Cross Road	1	50.00	1.00	0.10	5.00			
	5th A Cross Road	2	160.00	1.00	0.10	32.00			

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
	5th B Cross Road	1	50.00	1.00	0.10	5.00			
	6th B Cross Road	2	127.00	1.00	0.10	25.40			
	RCC Culvert								
	New Culverts	10	8.00	1.40	0.15	16.80			
		3	10.00	1.40	0.15	6.30			
						328.50	**Cum**	**5421.90**	**1781094.15**
3	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specifcation No. KBS 4.6.1 (P.No.16, I.No.4.28 of PW,P&IWTD SR 2018-19)								
	Basic rate	258.00							
	6% AW	15.48							
	Sub Total	273.48							
	Raft								
	RCC Culvert								
	New Culverts	20	8.00		0.20	32.00			
		6	10.00		0.20	12.00			
						44.00	**Sqm**	**273.48**	**12,033.12**
4	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.16, I.No.4.31 of PW,P&IWTD SR 2018-19)								
	Basic rate	358.00							
	6% AW	21.48							
	Sub Total	379.48							
	Side Wall								
	RCC Culvert								
	New Culverts	40	8.00		0.80	256.00			
		12	10.00		0.80	96.00			
						352.00	**Sqm**	**379.48**	**133576.96**
5	Providing and laying plain/reinforced **cement concrete for side drains using M20 nominal mix** concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo-**Wall and Bottom Thickness 10cm** (I No-37.59.1,P No-271)								
	Basic rate	6862.00							
	6% AW	411.72							
	Sub Total	7273.72							
	Raft Concrete								
	New RCC Drain								
	Near Vajram Apartment								
	Vijayaraj Estate Road	2	410.00	0.80	0.10	65.60			
	Shivapura, Bagalur Main Road								
	1st B Cross Road	2	270.00	0.80	0.10	43.20			
	2nd B Cross Road	2	260.00	0.80	0.10	41.60			
	3rd A Cross Road	2	40.00	0.80	0.10	6.40			
	3rd B Cross Road	2	60.00	0.80	0.10	9.60			
	4th A Cross Road	2	150.00	0.80	0.10	24.00			
	4th A Cross Road	1	50.00	0.80	0.10	4.00			
	5th A Cross Road	2	160.00	0.80	0.10	25.60			
	5th B Cross Road	1	50.00	0.80	0.10	4.00			
	6th B Cross Road	2	127.00	0.80	0.10	20.32			

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
	Sidewall Concrete								
	New RCC Drain								
	Near Vajram Apartment								
	Vijayaraj Estate Road	4	410.00	0.10	0.60	98.40			
	Shivapura, Bagalur Main Road								
	1st B Cross Road	4	270.00	0.10	0.60	64.80			
	2nd B Cross Road	4	260.00	0.10	0.60	62.40			
	3rd A Cross Road	4	40.00	0.10	0.60	9.60			
	3rd B Cross Road	4	60.00	0.10	0.60	14.40			
	4th A Cross Road	4	150.00	0.10	0.60	36.00			
	4th A Cross Road	2	50.00	0.10	0.60	6.00			
	5th A Cross Road	4	160.00	0.10	0.60	38.40			
	5th B Cross Road	2	50.00	0.10	0.60	6.00			
	6th B Cross Road	4	127.00	0.10	0.60	30.48			
						610.80	**Cum**	**7273.72**	**4442788.18**
6	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2018-19)								
	Basic rate	5444.00							
	6% AW	326.64							
	Sub Total	5770.64							
	Raft								
	RCC Culvert								
	New Culverts	10	8.00	1.20	0.20	19.20			
		3	10.00	1.20	0.20	7.20			
	Side Wall								
	RCC Culvert								
	New Culverts	20	8.00	0.20	0.80	25.60			
		6	10.00	0.20	0.80	9.60			
						61.60	**Cum**	**5770.64**	**355471.42**
7	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio (I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	6% AW	4093.98							
	Sub Total	72326.98							
	Consider 55kg/Cum for drain	1	610.80	55.00		33.59			
	Consider 90kg/Cum for Culvert	1	61.60	90.00		5.54			
						39.14	**Tn**	**72326.98**	**2830733.34**
8	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	Precast Covering Slab								
	New RCC Drain								
	Near Vajram Apartment								
	Vijayaraj Estate Road	2.00	410.00	0.80		656.00			
	Shivapura, Bagalur Main Road								

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
	1st B Cross Road	2.00	270.00	0.80		432.00			
	2nd B Cross Road	2.00	260.00	0.80		416.00			
	3rd A Cross Road	2.00	40.00	0.80		64.00			
	3rd B Cross Road	2.00	60.00	0.80		96.00			
	4th A Cross Road	2.00	150.00	0.80		240.00			
	4th A Cross Road	1.00	50.00	0.80		40.00			
	5th A Cross Road	2.00	160.00	0.80		256.00			
	5th B Cross Road	1.00	50.00	0.80		40.00			
	6th B Cross Road	2.00	127.00	0.80		203.20			
						2443.20	**Sqm**	**2337.00**	**5709758.40**
9	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Data rate	5418.00							
	RCC Culvert								
	New Culverts								
		10	8.00	1.40		112.00			
		3	10.00	1.40		42.00			
						154.00	**Sqm**	**5418.00**	**834372.00**
10	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Basic rate	41.00							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	53.80							
	6% AW	2.46							
	Total	56.26							
	Asphalt Road								
	New Asphalt Road								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50	0.40	1722.00			
						1722.00	**Cum**	**56.26**	**96,879.72**
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	6% AW	113.28							
	Sub Total	2001.28							
	Asphalt Road								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50	0.225	968.63			
						968.63	**Cum**	**2001.28**	**1938489.84**

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.158, I.No.21.6 of PW,P&IWTD SR 2018-19)								
	Basic rate	28.00							
	6% AW	1.68							
	Sub Total	29.68							
	Asphalt Road								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50		4305.00			
					Sub Total	**4305.00**			
						4305.00	**Sqm**	**29.68**	**127772.40**
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.158 I.No.21.7 of PW,P&IWTD SR of 2018-19)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Final Rate	12.72							
	Tack Coat For DBM								
	DBM								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50		4305.00			
	Tack Coat For BC								
	Asphalt Road								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50		4305.00			
						8610.00	**Sqm**	**12.72**	**109519.20**
14	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	6470.00							
	6% AW	388.20							
	Sub Total	6858.20							
	DBM								
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50	0.05	215.25			
						215.25	**Cum**	**6858.20**	**1476227.55**
15	KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4% VG-30 Bitumen(P.No-162,I No-21.22.6)								
	Basic rate	7464.00							
	6% AW	447.84							
	Sub Total	7911.84							
	Asphalt Road								

Sl No	Description of Items	No	Length, m	Width, m	Depth, m	Quantity	Unit	Rate	Amount
	Near Vajram Apartment								
	Vijayaraj Estate Road	1	410.00	10.50	0.04	172.20			
						172.20	**Cum**	**7911.84**	**1362418.85**
16	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	6% AW	25.74							
	Sub Total	454.74							
	Edge Line	2	410.00	0.10		82.00			
	Centre Line	0.50	410.00	0.10		20.50			
						102.50	**Sqm**	**454.74**	**46,610.85**
17	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete. (P.No 27 of I.No.5.30 in PW,P&IWTD SR 2018-19)								
	A.Basic rate	**408.00**							
	B.Area Weightage 6%	**24.48**							
	Total	**432.48**							
	New Kerbs								
	Near Vajram Apartment								
	Vijayaraj Estate Road	2	410.00	--	/0.45	1822.00			
						1822.00	No's	432.48	**787978.56**
18	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	A.Basic rate	99.00							
	B.Area Weightage 6%	5.94							
	Total	104.94							
	Kerb Painting	Sqm							
	Near Vajram Apartment								
	Vijayaraj Estate Road	2.00	410.00		0.35	287.00			
						287.00	Sqm	104.94	**30117.78**
19								**Total Construction Cost**	**22619816.60**
20								**12% GST to Construction Cost**	**2714377.99**
21								**Cost towards Preparation of DPR 1%**	**226199.00**
								Cost towards PMC / Third Party inspection 1%	**226199.00**
22								**Sub Total**	**25786592.59**
								Miscellaneous and rounding off	**13407.41**
								TOTAL	**25800000.00**

Administrative Approval
Accorded For Rs. 258 Lakhs
Head of A/C P-3584
CER NO : 47 Dt: 29/9/2019
E.E. (Project)

Technical Sanction
Accorded For Rs. 258 Lakhs
Head of A/C P-3584
CER NO : 80 Dt: 20/09/2019
CE (YNK)

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Assistant Engineer
Yelahanka Project Division
BBMP Bangalore

19/9/2019
Asst. Executive Engineer,
Yelahanka Project Division
BBMP Bangalore

16/9/19
Executive Engineer,
Yelahanka Project Division
BBMP Bangalore